

Chapter 18

User Acceptance of eGovernment Services: Analysis of Users' Satisfaction Level Based on Technology Acceptance Model

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ABSTRACT

This chapter identifies user satisfaction levels of eGovernment services. Technology Acceptance Model (TAM) deals with the prediction of the acceptability of an information system. TAM posits that perceived usefulness and perceived ease of use determine an individual's adoption of a system with intention to use serving as a mediator of actual system usage. In this chapter, a modified version of the TAM is proposed to predict the acceptability of eGovernment services and to identify the modifications, which must be brought to the system in order to make it acceptable to users. In the chapter, one of the most used eGovernment projects, e-school, is investigated according to TAM. An Internet-based survey questionnaire was applied to identify factors that influence users' satisfaction from one of the eGovernment services in Turkey. The sample was 30 teachers, who are working in public and private schools. A factor analysis was conducted on the questionnaire items, and a regression analysis, dependent on the factor analysis, was performed to determine and evaluate the effects of the factors on user satisfaction. The authors found that five main factors have significant affect on the satisfaction of users related to the e-School system. These factors are utilitarian ease of use, system usefulness, system content, system usability, and ease of use. The authors contributed to existing literature by adding a new construct, which refers to utilitarian ease of use.

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INTRODUCTION

The use of Information Technology (IT), particularly the use of the Internet, has had a substantial impact on the way local, state, and national governments function, and has caused them to transform the way they deliver services to citizens (Gupta, et al., 2008; Vathanophas, et al., 2008). Diffusion of Internet among citizens in the world is steadily increasing. The highest increase rate in Internet users among the world regions was observed in North America with 74.2 percent of the population. While developed countries have exploited the power of the Internet to successfully enable public services, developing countries have been comparatively slow in developing successful e-government strategies (Stoltzfus, 2004; Weerakody, et al., 2007). As a developing country, in Turkey, the rate of Internet users was 34.5 percent of the population in 2009 and e-readiness ranking of Turkey was 43 with the 5.64 e-readiness score among 70 countries in 2008 and 5.34 in 2009 (Economist Intelligence Unit, 2009).

The increase in Internet usage has transformed society and provided various benefits for citizens (Lekprayoon, 2004). In addition to an increase in use, satisfaction with Internet initiatives is also increasing. According to Carter (2008), those who interact with government agencies online are more satisfied with their electronic services every year. Significant increase in diffusion of Internet and high level of citizen satisfaction with e-government services directed the e-government initiatives to use IT, particularly the Internet for public administration, government process transformation, organizational transparency, and public communication (Vathanophas, et al., 2008).

This study focuses on studying the factors that lead to adoption of eGovernment projects in a government organization in an economically developing country. In this research, we examine the factors that influence adoption of eGovernment projects by employees in a government organization (G2E) in Turkey. We use Technology

Acceptance Model to evaluate user acceptance of an eGovernment project. The chapter is organized as follows: the next section presents a review of existing literature on eGovernment and technology acceptance model. Then, a research model and hypotheses are presented for this study. In the following section on research methodology, the sample, data collection, and analysis methods are described. Finally, results of the study are described followed by discussion and conclusions.

BACKGROUND

The objective of this study is to examine factors that influence acceptance of one of the most eGovernment service, e-School, by teachers in schools. We will try to identify effects of gender, experience, and age as moderating variables on usage of eGovernment services. For the purpose of the study, literature is reviewed in two areas: research on eGovernment and research on technology acceptance model.

Research on eGovernment

Advances in information technology create a new mode of service delivery with eGovernment through the Internet (Baker, 2009). eGovernment is a key for reducing communication and information costs, maximizing speed, broadening reach, and eradicating distance (Norris, 2001). The main focus of eGovernment is the reorganization of service processes and citizen services (Schuppan, 2009).

eGovernment has six fundamental functions (Pardo, 2002; Arpacı & Ateş, 2010): (1) eGovernment allows citizen access to government information, (2) eGovernment provides services that facilitate compliance with rules or regulations, (3) eGovernment offers citizens' access to personal benefits, (4) eGovernment allows for electronic procurement including bidding, purchasing, and paying, (5) eGovernment provides government-to-

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